Salim Ciraci

List of Publications by Year
in descending order

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244 papers	24,294 citations	7551 77 h-index	7333 152 g-index
247 all docs	247 docs citations	247 times ranked	15231 citing authors

#	Article	IF	Citations
1	Two- and One-Dimensional Honeycomb Structures of Silicon and Germanium. Physical Review Letters, 2009, 102, 236804.	2.9	2,837
2	Monolayer honeycomb structures of group-IV elements and III-V binary compounds: First-principles calculations. Physical Review B, 2009, 80, .	1.1	1,769
3	Stable, Single-Layer MX₂ Transition-Metal Oxides and Dichalcogenides in a Honeycomb-Like Structure. Journal of Physical Chemistry C, 2012, 116, 8983-8999.	1.5	1,196
4	Titanium-Decorated Carbon Nanotubes as a Potential High-Capacity Hydrogen Storage Medium. Physical Review Letters, 2005, 94, 175501.	2.9	888
5	First-principles study of two- and one-dimensional honeycomb structures of boron nitride. Physical Review B, 2009, 79, .	1.1	580
6	Functionalization of Single-Layer MoS₂ Honeycomb Structures. Journal of Physical Chemistry C, 2011, 115, 13303-13311.	1.5	484
7	Electronic and magnetic properties of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>3</mml:mn><mml:mi>d</mml:mi></mml:mrow></mml:math>transition-metal atom adsorbed graphene and graphene nanoribbons. Physical Review B, 2008, 77, .	1.1	452
8	Mechanical and Electronic Properties of MoS₂ Nanoribbons and Their Defects. Journal of Physical Chemistry C, 2011, 115, 3934-3941.	1.5	427
9	High-capacity hydrogen storage by metallized graphene. Applied Physics Letters, 2008, 93, .	1.5	397
10	First-principles study of defects and adatoms in silicon carbide honeycomb structures. Physical Review B, 2010, 81, .	1.1	344
11	The response of mechanical and electronic properties of graphane to the elastic strain. Applied Physics Letters, 2010, 96, .	1.5	344
12	Functionalization of carbon-based nanostructures with light transition-metal atoms for hydrogen storage. Physical Review B, 2008, 77, .	1.1	315
13	Hydrogen storage of calcium atoms adsorbed on graphene: First-principles plane wave calculations. Physical Review B, 2009, 79, .	1.1	314
14	Systematic study of adsorption of single atoms on a carbon nanotube. Physical Review B, 2003, 67, .	1.1	305
15	Transition-Metal-Ethylene Complexes as High-Capacity Hydrogen-Storage Media. Physical Review Letters, 2006, 97, 226102.	2.9	304
16	First-principles study of zinc oxide honeycomb structures. Physical Review B, 2009, 80, .	1.1	298
17	A Comparative Study of Lattice Dynamics of Three- and Two-Dimensional MoS₂. Journal of Physical Chemistry C, 2011, 115, 16354-16361.	1.5	298
18	Single and bilayer bismuthene: Stability at high temperature and mechanical and electronic properties. Physical Review B, 2016, 94, .	1.1	295

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19	Bond-orbital model. II. Physical Review B, 1974, 10, 1516-1527.	1.1	267
20	Single-layer crystalline phases of antimony: Antimonenes. Physical Review B, 2015, 91, .	1.1	261
21	Adsorption and dissociation of hydrogen molecules on bare and functionalized carbon nanotubes. Physical Review B, 2005, 72, .	1.1	255
22	Structures of fluorinated graphene and their signatures. Physical Review B, 2011, 83, .	1.1	254
23	Silicon and III-V compound nanotubes: Structural and electronic properties. Physical Review B, 2005, 72, .	1.1	250
24	Systematicab initiostudy of curvature effects in carbon nanotubes. Physical Review B, 2002, 65, .	1.1	235
25	Molecular and dissociative adsorption of multiple hydrogen molecules on transition metal decoratedC60. Physical Review B, 2005, 72, .	1.1	234
26	Elastic and plastic deformation of graphene, silicene, and boron nitride honeycomb nanoribbons under uniaxial tension: A first-principles density-functional theory study. Physical Review B, 2010, 81, .	1.1	219
27	Tunable Adsorption on Carbon Nanotubes. Physical Review Letters, 2001, 87, 116802.	2.9	184
28	Graphene coatings: An efficient protection from oxidation. Physical Review B, 2012, 85, .	1.1	178
29	Tip-sample interaction effects in scanning-tunneling and atomic-force microscopy. Physical Review B, 1990, 41, 2763-2775.	1.1	176
30	A study of graphite surface with stm and electronic structure calculations. Surface Science, 1987, 181, 126-138.	0.8	167
31	Novel electronic properties of a potassium overlayer on Si(001)-(2Ã—1). Physical Review Letters, 1986, 56, 877-880.	2.9	157
32	Ab-initioElectron Transport Calculations of Carbon Based String Structures. Physical Review Letters, 2004, 93, 136404.	2.9	151
33	Current-voltage<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mrow><mml:mo>(</mml:mo><mml:mrow><mml:mi>I</mml:mi><mml:mtext>îˆ</mml:mtext><mml:mn></mml:mn></mml:mrow></mml:mrow></mml:mrow></mml:math> of armchair graphene nanoribbons under uniaxial strain. Physical Review B, 2010, 81, .		149
34	Superlattice structures of graphene-based armchair nanoribbons. Physical Review B, 2008, 78, .	1.1	148
35	Theoretical study of transport through a quantum point contact. Physical Review B, 1991, 43, 7145-7169.	1.1	144
36	Two-dimensional pnictogens: A review of recent progresses and future research directions. Applied Physics Reviews, 2019, 6, .	5.5	143

#	Article	IF	Citations
37	Yielding and fracture mechanisms of nanowires. Physical Review B, 1997, 56, 12632-12642.	1.1	142
38	GaN: From three- to two-dimensional single-layer crystal and its multilayer van der Waals solids. Physical Review B, 2016, 93, .	1.1	139
39	Armchair nanoribbons of silicon and germanium honeycomb structures. Physical Review B, 2010, 81, .	1.1	137
40	Electronic and magnetic properties of graphane nanoribbons. Physical Review B, 2010, 81, .	1.1	136
41	Chlorine Adsorption on Graphene: Chlorographene. Journal of Physical Chemistry C, 2012, 116, 24075-24083.	1.5	135
42	Dissociation of H<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>O at the vacancies of single-layer MoS<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review B, 2012, 85, .	1.1	132
43	Theoretical scanning tunneling microscopy and atomic force microscopy study of graphite including tipâ€“surface interaction. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1988, 6, 313-318.	0.9	129
44	Effect of tip profile on atomic-force microscope images: A model study. Physical Review Letters, 1988, 60, 1314-1317.	2.9	121
45	Reversible band-gap engineering in carbon nanotubes by radial deformation. Physical Review B, 2002, 65, .	1.1	121
46	First-principles approach to monitoring the band gap and magnetic state of a graphene nanoribbon via its vacancies. Physical Review B, 2008, 78, .	1.1	120
47	Self-healing of vacancy defects in single-layer graphene and silicene. Physical Review B, 2013, 88, .	1.1	119
48	Size Dependence in the Stabilities and Electronic Properties of Î±-Graphyne and Its Boron Nitride Analogue. Journal of Physical Chemistry C, 2013, 117, 2175-2182.	1.5	117
49	Dimensionality and size effects in simple metals. Physical Review B, 1986, 34, 8246-8257.	1.1	116
50	Pressure-induced interlinking of carbon nanotubes. Physical Review B, 2000, 62, 12648-12651.	1.1	116
51	Energetics and Electronic Structures of Individual Atoms Adsorbed on Carbon Nanotubes. Journal of Physical Chemistry B, 2004, 108, 575-582.	1.2	116
52	Magnetization of graphane by dehydrogenation. Applied Physics Letters, 2009, 95, .	1.5	110
53	Frictional Figures of Merit for Single Layered Nanostructures. Physical Review Letters, 2012, 108, 126103.	2.9	110
54	Oxygenation of carbon nanotubes:â€ƒAtomic structure, energetics, and electronic structure. Physical Review B, 2003, 67, .	1.1	109

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55	Prediction of a two-dimensional crystalline structure of nitrogen atoms. Physical Review B, 2015, 92, .	1.1	109
56	Stable single-layer structure of group-V elements. Physical Review B, 2016, 94, .	1.1	108
57	Atomic structure of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msqrt><mml:mn>3</mml:mn></mml:msqrt><mml:mspace width="0.16em" /><mml:mo>Ã—</mml:mo><mml:mspace width="0.16em" /><mml:msqrt><mml:mn>3</mml:mn></mml:msqrt></mml:mrow></mml:math>phase of silicene on $Ag(111)$. Physical Review B, 2014, 90, .	1.1	107
58	Novel features of quantum conduction in a constriction. Physical Review B, 1989, 39, 8772-8775.	1.1	105
59	Effects of hydrogen adsorption on single-wall carbon nanotubes: Metallic hydrogen decoration. Physical Review B, 2002, 66, .	1.1	104
60	Functionalized carbon nanotubes and device applications. Journal of Physics Condensed Matter, 2004, 16, R901-R960.	0.7	104
61	Exohydrogenated single-wall carbon nanotubes. Physical Review B, 2001, 64, .	1.1	103
62	Interaction of Adatoms and Molecules with Single-Layer Arsenene Phases. Journal of Physical Chemistry C, 2016, 120, 14345-14355.	1.5	98
63	Theoretical study of short- and long-range forces and atom transfer in scanning force microscopy. Physical Review B, 1992, 46, 10411-10422.	1.1	96
64	Surface metallization of silicon by potassium adsorption on Si(001)-(2Ã—1). Physical Review B, 1988, 37, 2955-2967.	1.1	94
65	Site-dependent electronic effects, forces, and deformations in scanning tunneling microscopy of flat metal surfaces. Physical Review B, 1990, 42, 7618-7621.	1.1	94
66	Stability of single-layer and multilayer arsenene and their mechanical and electronic properties. Physical Review B, 2016, 94, .	1.1	93
67	Functionalization of BN honeycomb structure by adsorption and substitution of foreign atoms. Physical Review B, 2010, 82, .	1.1	92
68	Local Reconstructions of Silicene Induced by Adatoms. Journal of Physical Chemistry C, 2013, 117, 26305-26315.	1.5	91
69	Chiral Single-Wall Gold Nanotubes. Physical Review Letters, 2004, 93, 196807.	2.9	89
70	Hydrogen storage capacity of Ti-doped boron-nitride and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">B</mml:mi><mml:mo>â^•</mml:mo><mml:mi mathvariant="normal">Be</mml:mi></mml:mrow></mml:math>-substituted carbon nanotubes. Physical Review B, 2007, 76, .	1.1	86
71	Long-range interactions in carbon atomic chains. Physical Review B, 2010, 82, .	1.1	86
72	Hydrogen absorption properties of metal-ethylene complexes. Physical Review B, 2007, 76, .	1.1	85

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73	Effects of adatoms and physisorbed molecules on the physical properties of antimonene. Physical Review B, 2016, 93, .	1.1	84
74	Theory of the quantum size effect in simple metals. Physical Review B, 1986, 33, 4294-4297.	1.1	83
75	Strained Si/Ge superlattices: Structural stability, growth, and electronic properties. Physical Review B, 1988, 38, 1835-1848.	1.1	83
76	Stable Single-Layer Honeycomblike Structure of Silica. Physical Review Letters, 2014, 112, 246803.	2.9	83
77	Theory of transition from the tunneling regime to point contact in scanning tunneling microscopy. Physical Review B, 1989, 40, 11969-11972.	1.1	81
78	Quantum effects of thermal conductance through atomic chains. Physical Review B, 2001, 63, .	1.1	81
79	Contact, nanoindentation, and sliding friction. Physical Review B, 1998, 57, 2468-2476.	1.1	79
80	Spin confinement in the superlattices of graphene ribbons. Applied Physics Letters, 2008, 92, .	1.5	79
81	Atomic scale study of superlow friction between hydrogenated diamond surfaces. Physical Review B, 2004, 70, .	1.1	77
82	Ballistic transport through a quantum point contact: Elastic scattering by impurities. Physical Review B, 1990, 42, 9098-9103.	1.1	76
83	Structural, mechanical, and electronic properties of defect-patterned graphene nanomeshes from first principles. Physical Review B, 2011, 84, .	1.1	76
84	Pentagonal nanowires:â€ƒA first-principles study of the atomic and electronic structure. Physical Review B, 2002, 65, .	1.1	75
85	Metallization of Silicon upon Potassium Adsorption. Physical Review Letters, 1987, 58, 1982-1985.	2.9	72
86	Fundamentals, progress, and future directions of nitride-based semiconductors and their composites in two-dimensional limit: A first-principles perspective to recent synthesis. Applied Physics Reviews, 2018, 5, .	5.5	71
87	Atomic chains of group-IV elements and III-V and II-VI binary compounds studied by a first-principles pseudopotential method. Physical Review B, 2005, 72, .	1.1	70
88	Half-Metallic Silicon Nanowires: First-Principles Calculations. Physical Review Letters, 2007, 99, 256806.	2.9	70
89	Electronic-energy-structure calculations of silicon and silicon dioxide using the extended tight-binding method. Physical Review B, 1977, 15, 4923-4934.	1.1	69
90	Optical properties of single-layer and bilayer arsenene phases. Physical Review B, 2016, 94, .	1.1	67

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91	Spintronic properties of zigzag-edged triangular graphene flakes. Journal of Applied Physics, 2010, 108, .	1.1	65
92	Structural, electronic, and magnetic properties of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>3</mml:mn><mml:mi>d</mml:mi></mml:mrow></mml:math>transition metal monatomic chains: First-principles calculations. Physical Review B, 2008, 77, .	1.1	63
93	Effects of silicon and germanium adsorbed on graphene. Applied Physics Letters, 2010, 96, .	1.5	63
94	Superlubricity through graphene multilayers between Ni(111) surfaces. Physical Review B, 2013, 87, .	1.1	63
95	Structure of aluminum atomic chains. Physical Review B, 2001, 64, .	1.1	61
96	Electronic structure of the contact between carbon nanotube and metal electrodes. Applied Physics Letters, 2003, 83, 3180-3182.	1.5	61
97	Quantum effects in electrical and thermal transport through nanowires. Journal of Physics Condensed Matter, 2001, 13, R537-R568.	0.7	59
98	Adsorption of carbon adatoms to graphene and its nanoribbons. Journal of Applied Physics, 2011, 109, 013704.	1.1	59
99	Silicite: The layered allotrope of silicon. Physical Review B, 2014, 90, .	1.1	59
100	First-principles study of GaAs nanowires. Physical Review B, 2009, 79, .	1.1	58
101	New Phases of Germanene. Journal of Physical Chemistry Letters, 2014, 5, 2694-2699.	2.1	56
102	Atomic theory of scanning tunneling microscopy. Physical Review B, 1989, 40, 10286-10293.	1.1	55
103	Atomic-scale study of dry sliding friction. Physical Review B, 1997, 55, 2606-2611.	1.1	55
104	Modification of electronic structure, magnetic structure, and topological phase of bismuthene by point defects. Physical Review B, 2017, 96, .	1.1	54
105	Long-Range Order and Segregation in Semiconductor Superlattices. Physical Review Letters, 1987, 58, 2114-2117.	2.9	53
106	High-conducting magnetic nanowires obtained from uniform titanium-covered carbon nanotubes. Physical Review B, 2004, 69, .	1.1	51
107	Scanning-tunneling microscopy at small tip-to-surface distances. Physical Review B, 1987, 36, 6194-6197.	1.1	50
108	Variable and reversible quantum structures on a single carbon nanotube. Physical Review B, 2000, 62, R16345-R16348.	1.1	50

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109	Theory of transition from the dihydride to the monohydride phase on the Si(001) surface. Surface Science, 1986, 178, 80-89.	0.8	48
110	Effects of Charging and Electric Field on Graphene Oxide. Journal of Physical Chemistry C, 2013, 117, 5943-5952.	1.5	47
111	Electronic structure of the (111) surface of semiconductors. Physical Review B, 1975, 12, 5811-5823.	1.1	46
112	Nanoscale Dielectric Capacitors Composed of Graphene and Boron Nitride Layers: A First-Principles Study of High Capacitance at Nanoscale. Journal of Physical Chemistry C, 2013, 117, 15327-15334.	1.5	45
113	Effects of charging and perpendicular electric field on the properties of silicene and germanene. Journal of Physics Condensed Matter, 2013, 25, 305007.	0.7	45
114	Adsorption of Group IV Elements on Graphene, Silicene, Germanene, and Stanene: Dumbbell Formation. Journal of Physical Chemistry C, 2015, 119, 845-853.	1.5	45
115	Chemical and substitutional doping, and anti-site and vacancy formation in monolayer AlN and GaN. Physical Chemistry Chemical Physics, 2018, 20, 16077-16091.	1.3	45
116	Perpendicular growth of carbon chains on graphene from first-principles. Physical Review B, 2011, 83, .	1.1	44
117	First-principles study of the iron pnictide superconductorBaFe2As2. Physical Review B, 2009, 79, .	1.1	43
118	Dissociative Adsorption of Molecules on Graphene and Silicene. Journal of Physical Chemistry C, 2014, 118, 27574-27582.	1.5	43
119	Thermal conduction through a molecule. Europhysics Letters, 1999, 47, 208-212.	0.7	42
120	Adsorption of potassium on the ideal Si(111) surface. Physical Review B, 1988, 37, 8432-8435.	1.1	41
121	Effects of the constriction geometry on quasi-one-dimensional transport: Adiabatic evolution and resonant tunneling. Physical Review B, 1989, 40, 8559-8562.	1.1	41
122	Spin-dependent electronic structure of transition-metal atomic chains adsorbed on single-wall carbon nanotubes. Physical Review B, 2006, 74, .	1.1	41
123	Domain formation on oxidized graphene. Physical Review B, 2012, 86, .	1.1	40
124	Structure dependent optoelectronic properties of monolayer antimonene, bismuthene and their binary compound. Physical Chemistry Chemical Physics, 2019, 21, 7907-7917.	1.3	40
125	Atomic and electronic structures of doped silicon nanowires: A first-principles study. Physical Review B, 2007, 76, .	1.1	39
126	Epitaxial growth mechanisms of graphene and effects of substrates. Physical Review B, 2012, 85, .	1.1	39

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127	Self-consistent study of confined states in thin GaAs-AlAs superlattices. Physical Review B, 1987, 36, 1225-1232.	1.1	37
128	Half-metallic properties of atomic chains of carbonâ€“transition-metal compounds. Physical Review B, 2005, 72, .	1.1	35
129	Effects of static charging and exfoliation of layered crystals. Physical Review B, 2012, 85, .	1.1	35
130	Theoretical study of crossed and parallel carbon nanotube junctions and three-dimensional grid structures. Physical Review B, 2004, 70, .	1.1	34
131	Metal nanoring and tube formation on carbon nanotubes. Physical Review B, 2002, 66, .	1.1	33
132	Hydrogen storage capacity of titanium met-cars. Journal of Physics Condensed Matter, 2006, 18, 9509-9517.	0.7	32
133	Controlled lateral and perpendicular motion of atoms on metal surfaces. Physical Review B, 1996, 54, 2175-2183.	1.1	31
134	Magnetic ground state in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>FeTe</mml:mi><mml:mn>2</mml:mn></mml:msub><mm , and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>NiTe</mml:mi><mml:mn>2</mml:mn></mml:msub></mm monolayers: Antiparallel magnetic moments at chalcogen atoms. Physical Review B, 2020, 101, .	1.1	31
135	Conductance through a single atom. Physical Review B, 1997, 55, R1981-R1984.	1.1	30
136	Model for phononic energy dissipation in friction. Physical Review B, 1999, 59, 16042-16046.	1.1	30
137	A comparative study of O2 adsorbed carbon nanotubes. Chemical Physics Letters, 2003, 380, 1-5.	1.2	30
138	Atomic strings of group IV, IIIâ€“V, and IIâ€“VI elements. Applied Physics Letters, 2004, 85, 6179-6181.	1.5	30
139	Atomic and electronic structure of carbon strings. Journal of Physics Condensed Matter, 2005, 17, 3823-3836.	0.7	30
140	Hydrogen-Saturated Silicon Nanowires Heavily Doped with Interstitial and Substitutional Transition Metals. Journal of Physical Chemistry C, 2012, 116, 15713-15722.	1.5	30
141	Ciraci and Batra reply. Physical Review Letters, 1988, 60, 547-547.	2.9	29
142	Formation of quantum structures on a single nanotube by modulating hydrogen adsorption. Physical Review B, 2003, 68, .	1.1	29
143	Transition Temperature of Superconductor-Insulator Superlattices. Europhysics Letters, 1991, 14, 261-266.	0.7	28
144	Metalâ€“Insulator Transition and Heterostructure Formation by Glycines Self-Assembled on Defect-Patterned Graphene. Journal of Physical Chemistry C, 2018, 122, 14598-14605.	1.5	28

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145	Two-dimensional C/BN core/shell structures. Physical Review B, 2011, 83, .	1.1	27
146	Theory of anomalous corrugation of the Al(111) surface obtained from scanning tunneling microscopy. Physical Review B, 1990, 42, 1860-1863.	1.1	26
147	Theory of Schottky barrier and metallization. Progress in Surface Science, 1991, 36, 289-361.	3.8	26
148	Initial stages ofPtgrowth onGe(001)studied by scanning tunneling microscopy and density functional theory. Physical Review B, 2004, 70, .	1.1	26
149	First principles study of electronic and mechanical properties of molybdenum selenide type nanowires. Physical Review B, 2006, 74, .	1.1	26
150	Functionalization of silicon nanowires with transition metal atoms. Physical Review B, 2008, 78, .	1.1	26
151	Lateral and Vertical Heterostructures of Transition Metal Dichalcogenides. Journal of Physical Chemistry C, 2018, 122, 1547-1555.	1.5	26
152	Single layers and multilayers of GaN and AlN in square-octagon structure: Stability, electronic properties, and functionalization. Physical Review B, 2017, 96, .	1.1	25
153	Above Room Temperature Ferromagnetism in Gd₂B₂ Monolayer with High Magnetic Anisotropy. Journal of Physical Chemistry C, 2020, 124, 12816-12823.	1.5	25
154	Self-assembly mechanisms of short atomic chains on single-layer graphene and boron nitride. Physical Review B, 2012, 86, .	1.1	24
155	First-principles investigation of structural and electronic properties of solid cubane and its doped derivatives. Physical Review B, 2000, 62, 7625-7633.	1.1	23
156	Static charging of graphene and graphite slabs. Applied Physics Letters, 2011, 98, .	1.5	23
157	An atomistic study on the stretching of nanowires. Journal of Physics Condensed Matter, 1997, 9, 10843-10854.	0.7	22
158	Lateral and Vertical Heterostructures of h-GaN/h-AlN: Electron Confinement, Band Lineup, and Quantum Structures. Journal of Physical Chemistry C, 2017, 121, 27098-27110.	1.5	22
159	Stability and electronic properties of monolayer and multilayer structures of group-IV elements and compounds of complementary groups in biphenylene network. Physical Review B, 2022, 105, .	1.1	22
160	Bond-orbital model for second-order susceptibilities. IEEE Journal of Quantum Electronics, 1975, 11, 40-45.	1.0	21
161	A First-Principles Study of the Structure and Dynamics of C8H8, Si8H8, and Ge8H8Molecules. Journal of Physical Chemistry A, 2000, 104, 2724-2728.	1.1	21
162	Spintronic properties of carbon-based one-dimensional molecular structures. Physical Review B, 2006, 74, .	1.1	21

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163	Modulation of Electronic Properties in Laterally and Commensurately Repeating Graphene and Boron Nitride Composite Nanostructures. Journal of Physical Chemistry C, 2015, 119, 13248-13256.	1.5	21
164	Glycine self-assembled on graphene enhances the solar absorbance performance. Carbon, 2019, 143, 329-334.	5.4	21
165	From low to high-temperature superconductivity: A dimensional crossover phenomenon? A finite size effect?. European Physical Journal B, 1991, 83, 313-321.	0.6	20
166	Planar heterostructures of single-layer transition metal dichalcogenides: Composite structures, Schottky junctions, tunneling barriers, and half metals. Physical Review B, 2017, 95, .	1.1	20
167	In-plane commensurate GaN/AlN junctions: Single-layer composite structures, single and multiple quantum wells and quantum dots. Physical Review B, 2017, 95, .	1.1	20
168	Tip-structure effects on atomic force microscopy images. Journal of Physics Condensed Matter, 1991, 3, 2613-2619.	0.7	19
169	Quantum heat transfer through an atomic wire. Journal of Physics Condensed Matter, 2000, 12, 3349-3358.	0.7	19
170	High-performance planar nanoscale dielectric capacitors. Physical Review B, 2015, 91, .	1.1	19
171	Tip induced localized states in Scanning Tunneling Microscopy. Physica Scripta, 1988, 38, 486-490.	1.2	18
172	Finite temperature studies of Te adsorption on. Surface Science, 2002, 519, 79-89.	0.8	18
173	Atomic-scale study of friction and energy dissipation. Wear, 2003, 254, 911-916.	1.5	18
174	Nanospintronic properties of carbon-cobalt atomic chains. Europhysics Letters, 2006, 73, 642-648.	0.7	18
175	Confined states in multiple quantum well structures of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">Si</mml:mi><mml:mi>n</mml:mi></mml:msub><mml:msub><mml:mi mathvariant="normal">Ge</mml:mi><mml:mi>n</mml:mi></mml:msub></mml:mrow></mml:math>nanowire superlattices. Physical Review B, 2007, 76, .	1.1	18
176	Ideal Al-Ge(001) interface: From chemisorption to metallization of the Al overlayer. Physical Review B, 1984, 29, 6419-6424.	1.1	17
177	Adhesive energy, force and barrier height between simple metal surfaces. Ultramicroscopy, 1992, 42-44, 163-168.	0.8	17
178	Carbon string structures: First-principles calculations of quantum conductance. Physical Review B, 2005, 71, .	1.1	17
179	Absence of metallicity in Cs-GaAs(110): A Hubbard-model study. Physical Review B, 1993, 47, 16391-16394.	1.1	16
180	Surfactant-mediated growth of semiconductor materials. Modelling and Simulation in Materials Science and Engineering, 2002, 10, R61-R77.	0.8	16

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181	Functionalization of Single-Layer Nitrogene by Vacancy, Adatoms, and Molecules. Journal of Physical Chemistry C, 2017, 121, 6329-6338.	1.5	16
182	Vibrations of the cubane molecule: inelastic neutron scattering study and theory. Chemical Physics Letters, 1999, 309, 234-240.	1.2	15
183	Theoretical study of focused field emission of electrons from a point source. Physical Review B, 1990, 42, 9221-9224.	1.1	14
184	Atomic-scale tip-sample interactions and contact phenomena. Ultramicroscopy, 1992, 42-44, 16-21.	0.8	14
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